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by

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(B. Sc. in Ed., Boston Teachers College, 1940)

INTEGRATION OF PHYSICAL EDUCATION AND LITERATURE FOR SEVENTH GRADE BOYS

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CHAPTER I

INTRODUCTION

Authorities in the field of education have pointed out the importance of meeting more adequately the needs of the adolescent pupil. Particular attention has been directed to the necessity, in curriculum instruction, for safeguarding and promoting the physical growth of the child. Expanding interests are manifested at this period by an increasing desire on the part of the child for participation in group activities. Administrative adjustment to these expectant behavior patterns has led to the reorganization of secondary education and the formation of the Junior High School.

Pupils of this age level, upon being introduced to a program of physical education for the first time exhibit a keen interest. This enthusiasm finds outlet in the accomplishment of physical skills and in participation in social activities. The problem of the physical educator is how best to utilize this interest and spontaneity.

One of the most cogent criticisms of present programs of physical education has been the reluctance of the physical education teacher to rise above routine drills in gymnastic and recreative skills.[1] In other words, teachers have remained almost exclusively within the realm of the physical in methods of teaching.

It was precisely this kind of criticism which led the writer to conduct the exploratory experiment which is the subject of this thesis. Also it was hoped, through the techniques of study developed, to increase greater

1. S. H. Jameson, "Physical Education and the Social Sciences", Journal of Health and Physical Education, X (December 1939), pp. 567-569.

interest in developing a more progressive outlook from the standpoint of method in the presentation of subject matter.

Statement of the Problem

In order to develop strength and ability in various physical skills such as those of throwing, running, jumping, balance, etc., which are fundamental to the rational development of an individual, a considerable amount of drill is necessary. In the past the physical education program has often consisted merely of a drill program, or to take an extreme, has frequently degenerated into free play programs. It is clear that if teachers of this subject are to command respect for their contribution to an educative process, they must be concerned with something more than the organization of a purely physical activity program. In addition there must be a background of cultural subject matter which will enrich the content of the activity program and so make it more meaningful to the pupils.

There are numerous methods of presenting the activities comprising the physical education program. There is, for example, the use of motivation through competition; one person, class or team matched against opposing units of equal ability. Or, there is a method of motivation through utilizing the social and cultural background of the subject matter.[1]

This thesis concerns the latter in that it endeavors to show the causes which advanced peoples of other periods to physical activity and supremacy. Practically, this was achieved by integrating the reading matter of the seventh grade course of study in English with the physical education program.

1. S. H. Jameson, op. cit., pp. 567-569

Purpose of the Study

The general purpose is to conduct an experiment which will make for more orderly progress toward the accepted aims of physical education. The development of each individual student into a happy and useful citizen is the general purpose of education.[1] Of course, the aims and objectives of physical education conform to those of education in general. They differ only in emphasis as conditioned by the activities of the physical education program.[2] These aims are the improvement of health, the development of social traits and the acquisition of a broad cultural background through the development of the power of appreciation of cultural inheritance.[3]

Specifically, the purpose of this study is to determine the effects of an enriched program of physical education designed to:

1. stimulate interest and appreciation of literature through the mastery of those skills alluded to in the literature,
2. develop a better understanding of the need of physical fitness through the performance of those activities which brought the ancients to physical supremacy, and
3. create a better attitude on the part of pupils toward maintaining their own physical fitness.

1. English Course of Study, Boston Public Schools, Doc. No. 2, 1937
2. F. R. Rogers, Fundamental Administrative Measures in Physical Education, pp. 10-11
3. English Course of Study, Boston Public Schools, Doc. No. 2, 1937

Implications of an Integrated Program

The study of literature offers one of the greatest opportunities for the development of cultural appreciation.[1] By the integration of physical education and literature it is hoped in this thesis to show the possibilities of developing within the mind of the junior high student the realization of the need of physical fitness. This is to be accomplished through the medium of active participation in physical activities directly relating to the subject matter. In participating in a physical activity the social and cultural significance of which has been directed to the attention of the child, not only is there a greater conception of the descriptive power of the printed word, but the isolated physical activity engaged in becomes more meaningful.[3]

An attempt will be made to show that the performance, by the students of the physical education class, in fetes of ancient origin will develop an understanding of the very human qualities of the characters peopling the literature of ancient times. By thus taking part in ancient games such as the Grecian game of three-cornered ball[4] or a relay race based upon the ancient torch races,[5] student interest in literature will grow as the physical patterns which governed the active lives of persons in another era are experienced.

1. English Course of Study , Boston Public Schools, Doc. No. 2, 1937
2. S. H. Jameson, op. cit.
3. W. G. Brink, Directing Study Activities in Secondary Schools, p.367
4. A. F. Sieveking, "Football", Field CXIX (April 6,1912),pp. 690-691
5. W. B. Forbush, Myths and Legends of Greece and Rome , p. 7-11

Aristotle[1] considered it necessary to instruct children in useful things "not because, as in reading, of its being useful in itself, but because of the instruction gained in other fields". The pupil who gains from reading[2] the understanding of the need of physical education and perfection brings to the physical education class a clearer conception of the social and health objectives of the subject.

The integration of literature and physical education has been further chosen because reading is one of the essential skills of life. Research in this field of reading skills has shown great deficiencies due to many causes as a result of which interest in the printed word is nil. Therefore to stimulate interest in reading matter for this group and to develop in those pupils of normal reading ability a greater appreciation of the background material of the printed word this work is undertaken.

The Need of this Study

Investigation of material available has shown little work in the field of integration of physical education and literature. A review of literature shows

1. the need for studies of this nature, and
2. the possibilities inherent in the physical education program for making a positive cultural contribution to the educative process.

The English Monograph Number Five: A Correlated Curriculum is a detailed report of the committee on correlation of the National Council of Teachers in English. This work, published in 1936,"a pioneer book" in

1. Aristotle, Politics, VIII, Chap.III
2. W.G. Brink, Directing Study Activities in Secondary Schools, p. 709

the field of correlation contains proposals for each possible type of correlation of English with other subjects. The material provided by the sixty-one advisors and contributors of the committee has been so arranged as to pass from the conservative, or merely incidental correlation, through correlation and fusing of subject matter to the more radical forms of complete integration in all fields.

The fields of education covered by this study include the correlation of English with the physical, biological and social sciences and the fine arts. Of the 326 pages contained in the book one and one-half pages of the Appendices contain the only mention of correlation of English with physical education. However, even this does not concern physical education as such, for it summarizes the place of the dance as a medium of self expression in man's development.

The Teacher's College report: Integrated Education in Lincoln School[1] reports the necessity of integration as an answer to the widespread disintegration that now exists in all areas of human existence. The work consists of individual reports on the possibility of integration in the different departmental areas of the school organization. The contributor Myer R. Ouida in his article "Leisure in the New Curriculum" says that "the physical education program should be used as a means of training for future leisure against the connotation of vague disapproval now attached to leisure time activities". By the presentation of a rich variety of experiences the physical education program should serve to assure progressive refinement in standards of taste, the acquisition of which is one of

1. Teacher's College Record, XXXVII, (February 1936).

the important goals of education.

Horrigan in Creative Activities in Physical Education[1] has compiled, after careful experimentation, a series of physical activities which lend themselves to correlation with other school subjects of the elementary grades.

According to Curriculum Making in the Elementary School, a publication of Columbia University by the Staff of the Lincoln School, "Physical Education is unrelated to any classroom activity".

Thus the apparent lack of interest in this field of education, as displayed by the absence of literature relative to this subject, has served as a challenge for a practical investigation into the possibilities of integrating physical education and literature with boys of the seventh grade level.

Procedure in Making this Study

In the organization of this study the following steps were pursued.

1. Review of the literature contained in the seventh grade reading list for any reference to physical activity.[2] The inclusion of all the literary works of the reading lists would cover too great a time span for thorough investigation therefore the task was delimited to the selection of those works which would offer the richest field in cultural background. The works chosen as a basis for securing the historical background are grouped in the Appendix.[3]

1. O. Horrigan, Creative Activities in Physical Education, A.S.Barnes,1929
2. English Course of Study, Boston Public Schools, Doc. No. 2, 1937
3. Appendix, C

2. Investigation into the historical background of those activities found within the reading matter of the seventh grade.[1] This was done in order to secure a more enriched program content for the organization of definite instructional units.

3. Organization of information obtained from the course of study and other references into activity units for pupil presentation.

4. Presentation of activity units to selected classes. Two classes of forty-six pupils each were chosen for the experiment. Insofar as possible the groups were equated according to intelligence, scholastic aptitude, height, weight and sex. One class was used as an experimental unit and the other as a control unit. This second class was used that it might serve as a measure to show the success or failure of the project. With the experimental group the historical material was used as the basis of motivation for the cultural appreciation of the need of physical fitness. With the control group the subject matter was presented in the traditional manner.

5. Comparison of results.

1. English Course of Study, Boston Public Schools, Doc. No. 2, 1937.

CHAPTER II

PHYSICAL EDUCATION IN ANCIENT GREECE

The athletic events described or alluded to in the seventh grade literature were limited to the following activities: running, jumping, throwing the discuss, ball play, wrestling, boxing, dancing and the all-inclusive word 'games' which to the Greeks meant all athletic events.[1]

In order to supplement the meager reference to physical activity found in the literature of the seventh grade reading lists, a more extensive study of the ancient literature, with particular attention to the field of physical education, was necessary. The information acquired from this historical research is to be found within this chapter. It was prepared for use in motivating the instructional units in physical education as described in Chapter IV.

In examining the material it was noted that the utilitarian qualities of athletic events of ancient Greece were for six hundred years economically valuable to the Greek state.[2] The constant practice of these activities was considered highly important to the continuance of the state.

Origin of Festival Games

The tales of Homer give the first sketchy background of what was later to develop into the great religious festivals at Olympia and the many lesser centers of religious and educational splendor.[3] The sagas of

1. English Course of Study, Boston Public Schools, Doc. No. 2, 1937
2. E. N. Gardiner, Athletics of the Ancient World, p. 2
3. Pythian, Nemean, and Isthmian Games

Homer eulogize the exploits of the Gods and heroes, of the superior man, the aristocrat. They were designed only as recreational activities for the entertainment of guests. No training was necessary for entrance into the events and according to the tales, the common man never participated.

The exhibition games were held, with religious sanction, as memorial services in honor of some deceased person. Because of this they gained the cognomen of funeral games. They were also offered as an act of thanksgiving to specific gods.

The Olympic games[1] originated as the result of the poor health and general social disintegration of the people. Tradition supplies the tale that the games had their inception with the command of the Oracle to one Iphitus of Elis who had sought information because Greece was torn by dissension and ravaged by pestilence. Historic records of this period are wanting, but from legendary command it can be assumed that disease and pestilence, caused by possible defeat in military maneuvers, had wrought havoc with the inhabitants of the Greek state. The logical way to economic recovery was through military sufficiency. This was to be accomplished with divine aid, as proven by the source of the command, by increasing the health and physical fitness of each individual citizen through participation in athletic competition.

Educational Opportunities Determined by Social Status

The stratification of the Greek populace into economic levels of freeborn citizen and slave eliminated the latter class from both military

1. "Classical Games", Encyclopaedia Brittanica, 14th Ed., pp. 8-11

training and the attendant state privileges.[1] The leisure time enjoyed by the freeborn was utilized in physical and mental advancement. All freeborn citizens between the ages of sixteen and twenty, whether of the nobility or merchant class, were conscripted for service in the military academy or epheboi. To be termed unfit for this duty in case of emergency was a disgrace and a sign of effeminacy. This, then, served as an incentive for the development of individual physical fitness in the years prior to enrollment in the epheboi.

Dual System of Education

Since all of these men were responsible for the protection of the state, this necessitated some form of organized training prior to enrollment in the army. This training considered to be the duty, privilege and right of all freeborn Athenians was gained through the dual system of education.[2] It was a balanced program of intellectual and physical development administered by the lyre school and the palaistra. In the intellectual or lyre school, music and the historic odes, poetry and the literature of the Greeks disseminated patriotic fervor. This instigated application to the techniques, skills and health measures learned at the palaistra. Here the physical perfection of the Greek youth assured the continuance of a healthy state through the development of its individual members.[3] The Goddess Palaistra, daughter of Hermes and patroness of wrestling, gave her name to the school and served as a symbol for the development of physical fitness.

1. Aristotle, Politics, Bk. VIII, Chap. 3
2. Plato, Laws, Bk. VII, p. 796
3. Philostratus, Images, Chap. 24

Extensive Facilities for Physical Education Provided

The physical plant of the Grecian Physical education system consisted of two types of buildings, the gymnasium and the palaistra. The Gymnasium, a large state-owned stadium, consisted of buildings and out-of-door playing areas where the men of Hellas gathered for game practice and social intercourse. The Palaistra, or wrestling school for boys, was a small privately owned building. It consisted of an open court surrounded by a colonnade which was flanked by the undressing rooms[1] and indoor classrooms. The physical activities took place within the courtyard.

Trained Teachers Employed

The teacher in charge of the palaistra was called a paidotribe. These teachers in the Grecian system were analogous to the modern physical educator, being skilled leaders in the techniques of athletics. In fact, their duties approximated the latest trends in the modern field of physical education in that they were expected, according to Aristotle, to arrange their work scientifically so that the individual differences[2] in pupils could be met. Teachers gained integrity through working in close association with the medical profession.[3] The literature of the period held professional workers in much the same light as modern science regards workers in the field of medicine and education.

1. E. N. Gardiner, Athletics of the Ancient World, p. 73
2. Aristotle, Politics, Bk. IV, I
3. Ibid, Bk. III, 16.

Reasons for Decline of Greek Physical Education

As long as the individual citizen participated in the games, the state flourished. But, as a result of an increase in awards, competition for the more plentiful and valuable prizes caused a breakdown of the system into rank professionalism.

Professional athletes developed a system of training with emphasis upon one individual skill. They made a business of traveling from one festival to another competing in only one event. In this manner their bodies became unevenly developed. For example, under this new system those athletes who excelled in the pankration were urged to eat huge quantities of meat that their weight might be increased.[1] This excess in weight was important in personal combat, for, no weight restrictions being evidenced in the Olympic laws, an excess in this commodity was an asset in the determination of the winner.

Professionalism corrupted the balanced methods of training taught at the palaistra and lyre schools which had striven at equal development of physical and mental powers. It placed unscientific emphasis upon the physical alone and concerned itself only with the development of those isolated muscles controlling the areas which had to do with the one specific skill specialized in by the athlete.

As a result of specialization the games drew fewer contenders from the ranks of the people. The professional athlete finally degraded what had been an art to the status of commercialization of muscular strength.

The insidious tentacles of professionalism were felt in all fields.

1. E. N. Gardiner, Athletics of the Ancient World, p. 101

As a result of nonparticipation in games the physical appearance of the Greek citizen became less beautiful for in contrast to the former symmetry of line the professional athlete was a monstrosity of muscular protuberances. In architecture the seating capacity of buildings was enlarged to accommodate the increased number of spectators. In art the enlarged musculature of the statues and painted figures of the vases of the fourth century amounts to physical deformity when contrasted with the beauty of line of those of the preceding century. Weakness in moral tone was evidenced in corruption and cheating. (This misrepresentation was called transfer and was practiced even at the sacrosanct Olympics). The military arm of the government was so weakened because of lack of athletic training that the race in armour[1] was added as early as the close of the sixth century to attract the nonprofessional athlete. Whether Plato influenced this addition is not known but in his laws he decries the present method of conducting athletic competition as being of little value in utility for military preparedness.

Program of Individual and Group Athletic Events

The Greek athletic events consisted of the pentathlon and the pankration. The pentathlon was a series of five individual and couple athletic events. These consisted of running, jumping, throwing the discus, throwing the javelin and wrestling. The pankration, done in a horizontal position, was a combination of boxing and wrestling.

While the reading references yielded a considerable amount of in-

1. Boston Museum of Fine Arts, Vase No. 13.83

formation, the most valuable source material of these historic athletic events was obtained from a study of the vase paintings of the period. These vases or cups were awarded to the winners of the games.[1] They usually depicted the characteristic actions of athletes in specific athletic events. From these paintings can be deduced the techniques[2] of the athletic events, the rules[3] governing the contestants and the character of the playing area.[4]

Running was stressed as an athletic skill because of its importance in training for war. As a fundamental skill it developed in response to the hereditary instinct for survival. It was singled out for particular emphasis because of its value along military lines for both offensive and defensive purposes.

Running races were chosen as one of the events of the festivals because of their utilitarian character in preparation of war. For Greece was surrounded by warlike neighbors and needed to keep the physical fitness motive constantly before the citizens responsible for her protection. It was also necessary to emphasize constantly the need for speed in assembly for combat as a vital factor in national defense. This necessity was a determining factor in the popularity of foot races.

Fundamental techniques of running have not changed. The modern style of running is essentially the same as that of the ancient Greeks. A comparison of any photographs of contemporary runners with those to be

1. E. Pottier, Douris and the Painters of Greek Vases, p. 12
2. Boston Museum of Fine Arts, Vase No. 10.179
3. Ibid, Vase No. 96.720
4. Ibid, Vase No. 28.48

found on the vase paintings[1] of the Hellenic games' prizes show techniques in running to be fundamentally the same. The long distance runner had a long easy stride, arms held close to the side, body inclined slightly forward, weight born on the balls of the feet. In contrast the sprinter strained forward, weight forward on the toes, heel elevated with accompanying marked contraction of the gastronomic group.

Any change in running technique over a period of 2500 years may be charged to the physical construction of the track. The Greeks for greater muscular development and in an effort to duplicate the type of terrain encountered in war time ran in sand.[2] This is in marked contrast to the hard-surfaced cinder and wood tracks of modern usage and might allow for some minor changes.

The track in ancient times was straight.[3] The area which it covered consisted of a series of parallel lines permitting as many as twenty contenders at a time. The entrant started from one end of the stadium either behind a line marked in the sand or from a starting post,[4] depending upon the equipment of the stadium, and raced to the finish marked by posts at the further end of the track. This, the stade race, was the shortest; it was about two hundred meters in length and gave its name to the amphitheatre which surrounded it, the stadium. The diaulos, the race of two laps, was once down and once back. The long distance race was called the dolichos and was any multiple of the stade.

1. Boston Museum of Fine Arts, Vase No. 98.876
2. Lucian, Anacharis: a Discussion of Physical Training, pp.190-212
3. E. N. Gardiner, Athletics of the Ancient World, p. 135
4. Boston Museum of Fine Arts, Vase No. 01.8033

Jumping was used by the Greeks as a form of recreation.[1] It did have practical use for it afforded means of locomotion over instead of through the streams of the neighborhood.[2] Of military value it was useless for the heavy martial equipment was not conducive to propulsion through the air.

The techniques used in the ancient high and long jumps are comparable to the modern standing and running broad jumps, the initial difference being, according to Gardiner, in the use of halteres.[3] These were heavy stones or pieces of metal employed by the ancients as a means of getting greater distance. Because their use required perfect timing, the training in jumping was broken down into separate drills. These drills were done to the accompaniment of the lute. From this rhythmic exercise with the halteres can be traced the dumb-bell drills of modern usage. However, the techniques of jumping, separated by a gulf of centuries, remain relatively the same.

The discus throw evolved as the result of necessity for defensive action against wild animals and hostile tribes. It became the third of the five events of the pentathlon. It was an athletic feat which required a distance and direction objective. The self-descriptive and explanatory Grecian philology defines the word discus as a thing for throwing. This weapon might vary in size, weight and shape. Up to the sixth century B.C., according to Gardiner,[5] it was a stone, averaging about eleven inches in diameter and fifteen pounds in weight. At the beginning of the fifth

1. Boston Museum of Fine Arts, Vase No. 01.802
2. Lucian, Anarchis
3. Boston Museum of Fine Arts, Vase No. 99.501
4. Ibid., Vase No. 01.802
5. E.N. Gardiner, Athletics of the Ancient World, p. 155

century a lump or pig of iron was used.[1] After this time the metal discus came into general usage, and was of the characteristic size and shape that the modern Olympics have made familiar.

The old Grecian technique of throwing the discus[2] is unlike the modern method. According to Gardiner,[3] the method as shown by Myron's reconstructed discus thrower is weight on the right foot, right arm and hand supporting the discus. In the throw the discus is carried forward and back in an easy arc or swing,[4] head turned and following the progress of the discus before the release. In the exertion of throwing the weight is brought forward onto the left foot.[5] The Myron statue freezes the last of the backward swing, in action, just before the release and transfer of weight. The modern technique differs in part for it employs a pivot turn but it does approximate the figure of the discus thrower.

The javelin, a weapon of war, was a popular sport and training practice of the Athenian epheboi.[6] In practice for distance a blunt capped spear was used but in actual target practice the pointed weapon was employed. For this event a target or bull's eye was formed by erecting on a pole a shield upon which a wreath had been placed. Into the center of this wreath or target the horsemen attempted to thrust the javelin. In placing the javelin a thong of leather called an amentum[7] was used. This was bound about the shaft and looped through the fingers of the throwing hand. By

1. Lucian, Anacharis
2. E.N. Gardiner, Athletics of the Ancient World, p. 160
3. Ibid.
4. Boston Museum of Fine Arts, Vase No. 01.8033
5. Ibid.
6. Boston Museum of Fine Arts, Vase No. 95.35
7. Ibid.

means of this throwing thong better direction was assured, for as the javelin was released the thong gave a rotary or spiral action to the shaft.

The modern technique of javelin throwing differs in that the use of the amentum has become obsolete. This has eliminated the necessity of the athlete's following or watching the backward swing of the javelin. Thus the modern contestant can keep his head forward with his eye on the target and be assured of better distance and direction.

Combat Activities

Wrestling,[1] the fourth activity of the pentathlon, consisted of two types, upright and ground,[2] both being descriptive of the planes in which they were exercised. Upright wrestling was done in deep sand. A series of holds was employed by the combatants in an effort to gain a fall. A fair fall was called when any part of the body touched the ground. Three such falls were necessary for victory. If both contestants fell simultaneously no fall was called. Tripping was allowed but the rules did not permit leg holds. Those holds used in modern scientific wrestling which are performed in an upright position approximate the techniques used in ancient Greece. In contrast to the upright the ground wrestler battled in soft earth which had been sprinkled with water. As the combat progressed the playing surface became the consistency of mud. This the Grecians considered to have beneficial qualities. Ground wrestling was a popular activity of the palaistra[3] but was not one of the accepted events of the pentathlon, and was therefore not an Olympic event.

1. Boston Museum of Fine Arts, Vase No. 01.8019
2. E.N.Gardiner, Athletics of the Ancient World, pp. 181-2
3. K.J.Freeman, Schools of Hellas, p. 130

The method of pairing off the contestants for combative events of wrestling and boxing at the Olympics is given by Lucian in his dialogue on dancing.[1] According to the author this was accomplished through chance. Into a consecrated urn pairs of lots bearing numbers were placed, these to be drawn by contestants seeking partners. If the number was uneven the athletes would draw a bye which was advantageous in that "the contestant came fresh against tired competitors."[2]

Boxing is said to have originated with the Spartans[3] who because a helmet was not included in their martial equipment of necessity developed dexterity in dodging and ducking behind their shields. Thus the technique evolved was defensive. Foot work was little used and all attack was aimed at the head.[4] The left arm was used as a guard raised and extended, and the right was used in attack. Because the only classification of contestants was limited to that of boys and men, no differentiation was made within the men's class in weight. Superiority in weight and reach often determined the winner.[5]

Ancient boxing became progressively degenerative. There are three definite periods in the decline of the art, these periods being characterized by the type of glove used. In the first period from the time of Homer to the end of the fifth century B.C., soft leather thongs were wrapped around the hands and laced up the arms.[6] In the second period from

1. Lucian, Dialogues, on Pantomime
2. Lucian, Anacharis
3. K.J.Freeman, Schools of Hellas, p. 133
4. Boston Museum of Fine Arts, Vase No. 96.720
5. E.N.Gardiner, Athletics of the Ancient World, p. 204
6. Boston Museum of Fine Arts, Vase No. 96.720

the fourth century B.C. to late Roman times, sharp thongs called sphairai were used. These were more like a glove in that the hand fitted into them. The fingers were free as in the former type but differed in that a cuff of sheepskin with the fleece side uppermost protected the forearm. The third type, a Roman innovation, was characterized by claw-like projections of metal with which the fighters attacked one another. The Grecian boxing match was a fight to the finish or until one of the contenders begged for mercy.

Group Games

The highly organized team games so much a part of modern recreational life were conspicuous in the pre-Christian era by their absence. This was due in part to the program of military preparedness which stressed, through the work of the palaistra, the dependence of national security upon individual ability. However, although individual competitive activities predominated, a few ball games were known and enjoyed great popularity.

Ball play, one of the favorite sports of Grecian life, was not an event of the festival games.[1] This three-man game, called by the Romans of a later day: triangolis, consisted of passing six balls from one player to another. Dexterity and agility in keeping the balls in motion were the objectives of the activity. The game was enjoyed by both sexes and all ages from six to sixty.

Harpastum was a team game of low organization.[2] It involved the

1. Lucian, Anacharis
2. E.N.Gardiner, Athletics of the Ancient World, p. 232

passing of a ball from one team player to another in an effort to retain possession of it against the opposition of the opposing team.

Epikinosis, a game played between teams of equal numbers, was most popular with the epheboi. The playing area was marked off into restricted sections of play, the object being to pass the ball over the end line or goal line of the opposing team. This latest bit of evidence of team play was discovered as late as 1922. In that year, according to Gardiner, a relief[1] attributed to the sixth century B.C. was unearthed. It depicts athletes in the process of playing a team game.

The Dance in Ancient Greece

Ancient dancing was considered by the Greeks to be more of an intellectual[2] than a physical accomplishment. This art according to Lucian[3] was not to be degraded by subjection to criticism resultant from public competition. Therefore dancing was not included as a physical exercise of the Olympic games.

The meaning of the word dance has lost its original significance. The literal translation of the Grecian word is pantomime thus giving it a histrionic interpretation. All phases of life, all events historical and contemporary, religious and secular were enacted by the pantomime and the choral group. Some of the techniques learned in the palaistra were used in the dance. Therefore, it was argued that the dance by practical application

1. E.N.Gardiner, Athletics of the Ancient World, Plate No. 212
2. Lucian, Dialogues, on Pantomime
3. Ibid.

was of as much use in combat as the learning of the primary defensive actions[1] alone, and that the pleasure gained far exceeded that afforded by that far less safe competition.

Lucian is the authority for the statement[2] that the intellectual primacy given this art was due to the clear interpretation given the subject matter by the dancer. This could only be accomplished througha detailed knowledge of historical and mythological background in order that the event depicted by the dancer might follow the sequence of chronological order.

Freeman states[3] that there were two important dances, the naked dance and the war dance.[4] The first of these was a series of mimetic dances of the palaistra set to music. The second according to Lucian was introduced by the mythical Rhea.[5] The sophist describes the dance as performed in full armor "sword clashed against shield and inspired heels beat martial time upon the ground".[6]

Dancing was not included as one of the regular subjects in the education of the Greek youth. However, to supply the necessary demand required for the performance of war dances[7] at the periodic festivals accomplished boys were chosen[8] to be trained by choral masters.

1. Lucian, Dialogues, on Pantomime
2. Ibid.
3. K.J.Freeman, Schools of Hellas, p. 146
4. Ibid., p. 147
5. Lucian, op. cit.
6. Ibid.
7. Boston Museum of Fine Arts, Vase No. 13.205
8. K.J.Freeman, op. cit., p. 148

SUMMARY

The foregoing material was assembled with a view to applying it to a program of physical education for junior high school boys. The data which it contains on the historical significance of the ancient Grecian educational system, the festival games and the rise and fall of Grecian physical education were used, in part, in the introductory lesson to the Greek unit.[1] The remaining material was used for the motivation of the fifteen lessons of the units which followed.

A modification of these ancient physical activities will be found more successful in application to the school program. Thus in developing a program of activities

1. running should be motivated by the Grecian objective: endurance. It is anticipated that this will cause a more perfect technique in double-quick running and greater speed in racing.
2. rhythmic perfection gained by the ancients through constant practice with the aid of musical accompaniment should give the pupils a deeper insight into the necessity of constant practice in rhythmic unison.
3. the techniques of throwing the discus and javelin would serve as motivation in direction and distance placement in ball skills and team games.
4. the ancient ball games should serve to show the origin of team play and the necessity of constant practice in rhythmic unison.
5. the combative events of wrestling and boxing should be used to stress general endurance and agility rather than actual physical combat.

1. K. Freeman, Schools of Hellas, p.

CHAPTER III

PHYSICAL EDUCATION IN MEDIEVAL AND EARLY MODERN TIMES

Although a multitude of years separate the Medievalists and the Early Moderns from the peoples of Ancient Greece, a strong bond united them. This unity was accomplished through the force of the Crusade movement and the Turkish conquest of the western world. The unifying factor affecting peoples two thousand years or more apart was the literature of the Greeks.

The philosophies of the ancient Greeks vitalized the period preceding the Renaissance. This was due to the Crusades which though religious in objective focused the attention of the Christian world upon the less spiritual life, manners and customs of the peoples of the East. This resulted in an interest in the fields of life of those far places which increased in ratio equal to the religious objective. Because of the difficulty in transportation, only the more portable things found their way into western Europe with the returning Crusaders. Thus recipes for cooking, medical formulas, methods of dress and of warfare, materials and manuscripts widened the Medieval horizon.

The early Moderns were further influenced by the Ancient Grecian culture. This was due to the influx of ancient manuscripts brought by scholars who, following the overthrow of Constantinople in the fifteenth century, sought a safe haven in the west. These refugees brought with them the literary treasures inherited from the preceding regimes governing the Peloponnesus.

This caused a rebirth of learning which took different forms of

expression.[1] Thus Italy is noted for a new development of art and architecture and for a literary form which influenced all nations. In England this rebirth of learning became known as Italianism and was one of the factors influencing the Puritan reformation.

The reform movement in England brought further impetus to the study of literature written prior to the Christian era. For, according to Elyot, Cromwell, in an effort to stamp out any possible influence engendered by the Roman Church, confiscated libraries composed of the works of the Church fathers. This then forced further attention to the ancient classics.

The writers of the early modern period advocate the identical athletic activities of the ancient Greeks.[2] Using for the first time the vehicle of the English language as a tool of literary expression, the authors Elyot, Ascham, Mulcaster and Peacham plagiarize the literary works of the ancient Greeks.

Cultural practices common to specific nations have been made known to all peoples because of periodic migrations during military invasions, religious pilgrimages, and reform movements. This is especially noticeable in the field of recreative activities. For this reason few instances have been found by ethnologists[3] to substantiate claims of games being popular to any one country. For example, hot cockles, a game in which a blindfolded player attempts to guess the identity of the person who tagged or struck him, was popular in medieval England.[4] It was known to the French

1. L. Einstein, Italianism, p. 41
2. Ibid, p.
3. E.B.Tylor,"Origin of Games",Fortnightly Review,XIII(May 1879)pp735-747.
4. J.Strutt,The Sports and Pastimes of the People of England, p.308

of the same period as hautes coquilles. A game similar to it called buffet play was used by the Ancient Greeks. An episode in the passion of Christ as recorded by St. Luke[1] describes the game for "they blindfolded him and smote his face. And they asked him saying: prophecy who is it that struck thee."

In like manner other games and activities can be traced to ancient and medieval times.[2] The passage of time has, of course, altered the rules, playing areas and objectives, but fundamentally they are the same.

The Tournament

The tournaments and jousts of the middle ages were exercises of war, sportive pastimes employed by the nobility to dispel the ennui occasioned by idleness accompanying peace.

The Origin of the Tournament

According to Gardiner[3] the Spartan game of Platanistas bears a strong resemblance to the medieval tournament. This ancient Grecian game consisted of play or combat between opposing units for possession of the field of play. This field was an area entirely surrounded by a water-filled ditch. The object of the game was to clear the field of opponents.

Strutt states that it is from the Troy[4] game that the tournaments are supposed to have developed. This was a series of evolutions performed on horseback by Roman youth. The Troy game was non-combative and was used

1. Luke, XXII, 64
2. E.N.Gardiner, op.cit., p. 107
3. Ibid.,p. 231
4. J. Strutt, Sports and Pastimes of the People of England, p. 113

merely as a means of displaying individual skill in horsemanship.

During the twelfth century the young men of London engaged in similar activities but added the combative features of personal conflict.

The Basic Skills of the Tournament and the Joust

The tournament was a combination of skills which were practiced during peace time as a measure of preparation for future military use. The joust employed the same activities as the tournament but was confined to couple combat. The two basic skills were tilting at the quintain and the ring.[1]

The quintain[2] as originally used consisted of the trunk of a tree at which knights thrust spears and javelins in target practice. Later a shield was set upon a post at which the contenders tilted. The religious and social trend of the Crusades, is reflected in the next development[3] for the target was made in the image of an armed adversary, a Saracen or Turk. This figure was placed upon a pivot which when struck by the lance of a charging horseman revolved striking the luckless knight whose ability in horsemanship was unequal to his markmanship. Tilting at the quintain required accuracy of aim in charging at and hitting the target and speed and dexterity of horsemanship in attempting to avoid a hit when the quintain was set in motion.

The art of tilting at the ring was a companion skill to quintain tilting and evolved from it. This consisted of impaling a ring which was

1. J. Strutt, op.cit., p. 112
2. Ibid., p. 109
3. Ibid., p. 110

suspended from an upright post upon the point of the contender's spear. This activity was designed to develop greater accuracy in the placing of the spear.

The medieval athlete by constant practice became adept at these fundamental skills. As a result the tournament became a dangerous form of recreation which resulted in Papal and royal edicts being issued against their continuance.

Rules Governing the Tournament

The tournament was regulated by a series of rules to which all participants were subject. An open field, the playing area, was lined off and the opposing mounted teams drew up in mock battle array awaiting the starter's signal to engage. Upon this signal the opposing knights attempted by tilting to unhorse their antagonists. Those knights engaged in combat had seconds or pages within the playing area whose duty it was to assist their squire in any way short of actual combat. The participant was allowed to claim time out for rest if the heat of the game became too much for his capabilities. During this time the fighter, unhelmed, was exempt from attack. It will be seen that some of the rules are most interesting in that they have counterparts in modern games.

Effect of Humanism upon Recreation

The literature of the early modern period is replete with references to Greek and Roman activities, games, sports and dances. It is as if there

1. Elyot, The Gouvenor
   Ascham, The Schoolmaster
   Peacham, The Complete Gentleman
   Erasmus, Colliloquies

had not been an interval of fifteen hundred years in which the economic framework of Christianity, the feudal system, had flourished and died. This seeming incongruity in the literature of the fifteenth and sixteenth centuries is the manifestation of humanism. This was the result of the teachings of Petrarch of fourteenth century Italy who, enamoured of the Latin classics, became the founder of a new thought in education. This vogue of classicism demanded that all educated men know Latin and Greek and that in their writings they refer constantly to the literary masters of ancient Greece and Rome.

That practical use was made of ancient manners and customs is found in the application of ancient methods of physical activity[1] to the life of the fifteenth century nobleman. Elyot[2] advocates the following activity as being necessary

> "moderate walkings, labouring with poises made of lead or other metal called in Latin alteres, lifting or throwing the heavy stone or bar, playing at tennis and divers similar exercises."

With the exception of tennis any of these activities may be directly traced to the festival games or the game techniques of the Greeks.

The Cotswold Games

The social significance of classicism is portrayed in the enactment of the Cotswold games. This was a yearly festival revived with the sanction of James I[3] by one Robert Dover. The games were held in the Cotswold

1. J. Stow, Survey of London, p. 120
2. Elyot, The Gouvenor
3. Annalia Dubrensia, The Shakespeare Society

hills in Gloucestershire. It is known that some such activity had taken place there since the time of the Saxons.[1] Their tremendous popularity at this time is due not only to royal sanction but to the timeliness, following the trend of classicism, in naming the Sports Olympics, "which poore wee had not so much as dreamed of but for thee."[2]

The games consisted of individual and group competitive activities. Wrestling, cudgel play, leaping, foot races, pitching the bar, throwing the sledge, tossing the pike and other feats of strength. Horse races and coursing the hare entertained the gentry and dancing held the interest of both men and women.

The activities were designed for the benefit of the lower-class country folk.[3] However, their extreme popularity is evidenced by the patronage and participation of the gentry and nobility. Many of these people of the upper class were poetical contributors with other more talented persons of the period to a collection of poems in descriptive and extravagant praise of the games and their founder, Robert Dover.

Team Games

Team games as we know them today can be traced, according to Sieveking,[4] to Feudalism. It was this economic system which fostered the martial atmosphere of the tournament and caused the development of group competition. Football, the primary team game of the medieval and early

1. J. Strutt, op. cit., p. xx.
2. Michael Drayton in Annalia Dubrensia
3. Annalia Dubrensia
4. A.F. Sieveking, "Football", Field CXIX (March 1912), pp.599-561

modern times influenced all team play which had to do with passing, kicking, slapping and throwing the ball.

Football until the fifteenth century was a free-for-all engaged in by entire communities.[1] In England and Scotland units within a community, such as married men versus single men, would contend one against the other. Manor houses situated in different counties were chosen as the goals of these contending teams. Then, like armies, the players ranged over miles of countryside scattered, ambushed and attacked their opponents. The game was most vicious and not infrequently players were seriously injured.[2]

In Italian cities the game took on the aspect of a pageant. This was due to the fact that the Florentines had civilized the game by a series of rules.[3] A definite playing area of one hundred seventy-six by eighty-two yards was established. This playing area was usually mapped out within the principal square of a city that the spectators might be more conveniently accommodated in the vantage points offered by the surrounding buildings.

Team membership was reduced to fifty-four players. The game was modeled on fighting maneuvers. The men riotously arrayed in team colors and assigned to definite positions of forwards, backs, goals, etc., led by a team captain, advanced in attack formation. The players advancing with the ball fought forward to the opponents' goal. This consisted of a small tent or pavillion over which waved the team flag. All games were

1. P. Stubbs, Anatomy of Abuses, p. 184
2. A.F.Sieveking, op. cit., pp. 599-561
3. Ibid.

appropriately ended by the medieval equivalent of tearing down the goal posts for at the close of the game the ensign and the pavillion were torn to shreds.

Recreational Activities

The game of tennis developed within the limited areas of the manorial courtyard and the cloistered precincts of the monastery.[1] Thus, the architectural limitations of the locale determined the size and shape of the court. The game was originally played in France as jeu de paume, or palm play,[2] the ball being received and returned with the palm of the hand. Gloves and a mittenlike covering of cords and tendons wound about the hand for protection served as the embryonic racquet. A rope strung across the middle of the court served as the net. As the game became more popular covered courts were erected that the players might continue in inclement weather.

Hockey, lacrosse, cricket and golf and other games which employ a club or stick in propelling the ball are, according to Tylor,[3] of common origin. The games date back to the game of polo which originated in Persia during the eighth century, B.C. All of these games have been popular during early modern times, and some of them have enjoyed the social distinction of being the exclusive property of the upper classes.

Golf was one of the pastimes of the nobility. Due to the miles of countryside and the amount of time needed for playing the game was allocated

1. J. Strutt, op. cit., pp. 88-89
2. Ibid., p. 82
3. E.B. Tylor, "The Origin of Games", Fortnightly Review, XXXI (May 1879)

to the rural districts. Play was limited to one club. During the fourteenth century this club was made of wood curved at one end not unlike the present-day hockey stick. In the seventeenth century it is described as being straight-handled "made of ash about four and one-half feet in length; the curvature is affixed to the bottom, faced with horn and backed with lead."[1]

Archery, an instrument of war, was used in times of peace as a means of amusement. Popular as a sport during the medieval period it suffered a decline in early modern times. This was due to the increase in urban population, and the use of the land in metropolitan areas for building sites.[2] A survey of the lands adjoining the city of London was made during the reign of James I. All lands which had been enclosed since the reign of Henry VIII were thrown open once again for archery practice.

Because of its military importance in martial conflict, the government allotted special areas for its practice. Royal edicts commanded all able-bodied men from the age of seven to be the possessors of a long bow and prescribed that Sundays and holidays should be the days of practice.[3]

Bowling, according to Strutt, originated in the thirteenth century as an open air activity.[4] It was played as such until the sixteenth century when due to the enclosure of the lands, limitation of space forced the play within doors.

The game succeeded archery in popular favor because the limited amount of space necessary for play made it accessible to larger numbers of

1. J. Strutt, op. cit., p. 97
2. Ibid., pp. 49-50
3. Ibid., pp. 49-50
4. Ibid., p. 235

people. Unfortunately, the new recreational centers for bowling were attached to drinking houses.[1] Because of this and the attendant evils of gambling, they suffered from ill repute.

The Dance in Medieval and Early Modern Times

With the development of Christianity the high ideals of the basicly religious Grecian dance were lost to the new civilization.[2] For it viewed the art as the degenerate practice of a pagan state. Dancing went into a period of decline but finally evolved anew through the dramatization of folk ways and customs companion to the development of the new western nations of Europe.

In the medieval period the arts of tumbling, rope walking and dancing were interwoven. Illuminated Biblical manuscripts of the ninth century anachronistically depict Herodias in the performance of a medieval dance figure.[3] According to Strutt, in the dance before Herod, she is shown as standing on her hands. This type of physical skill was much enjoyed by the people of the Middle Ages.

Gleemen,[4] or entertainers, supplied the demand for this form of recreation. They traveled about the country in groups visiting castles and towns. Their varied repertoire consisted of the telling of tales, singing of songs, and the performance of skills or feats of strength and dexterity. All of these activities were done in time to music. These skills, known in medieval times as tumbling, when combined with the pantomimic actions

1. P. Stubbs, Anatomy of Abuses in England in Shakespeare' Youth, XIII
2. T. Elyot, The Gouvenor, Ch. II
3. J. Strutt, op.cit., p. 175
4. Ibid., p. 191

accessory to story telling, gave rise to the new dance.

The first dance patterns were simple formations. They consisted of circles, rounds, winding heyes, and those patterns formed by retreating and advancing to meet one's partner. The steps were equally simple slides, glides, skips and leaps. As time progressed the patterns and steps became more intricate giving rise to evolutions which became the nomenclature of the various periods. Thus the pavanne, a courtly dance of Spanish origin, dramatized the stately walk of the peacock. The galliard, a lively dance of French origin, characterized by a sportive leap into the air, was popular during Elizabethan times as was the capriole which consisted of a leap with successive clickings of the heels while in mid air.

Lacking the spiritual aims of the ancients, the dance was incomprehensible to the Medievalists. Its purpose in medieval times was simply physical release. For this reason it had most vulgar beginnings, one of which, according to Strutt[1], was the sacrilegious dramatization of religious practices. A cut of this dance called the Fool's Dance from Sports and Pastimes[2] shows the performers in the process of a right and left.

From these small beginnings the dance has developed encyclopaedic dimensions. For the body of folk dances which has come down to the present generations encompasses the customs, traditions, heroic exploits and economic history of the peoples which it dramatizes.

1. J. Strutt, op.cit., p. 146
2. J. Strutt, op.cit., Plate XVI

Summary

The medievalists contributed a new phase to the field of physical education in the development of organized team play. This was due to the economic system of Feudalism and the military practices of the tournament.

The early moderns, influenced by the spirit of humanism, adapted the ancient physical activities of the Greeks to their way of life. The moderation and balanced method of physical and mental development of the Greeks found expression in the writings and teachings of educators of early modern England. Educators, influenced by the writings of the ancients, advocated the same feats of strength in wrestling, the same methods of leaping and jumping, the same practices of exercises with halteres. In fact, all of the athletic events, with their attendant training practices, which initiated Greek supremacy were recommended.

CHAPTER IV

THE ORGANIZATION OF INSTRUCTIONAL UNITS

According to the Physical Education Course of Study[1] of the Boston Public Schools, it is better to do a limited amount of work well than to attempt a more ambitious program, the content of which will not be thoroughly assimilated by the student body. Also, the time allotted to the program of physical education consists of two forty-minute periods per week. The allocation of specific physical activities within this time is prescribed by the course of study as follows:

I. Free Play Period: This is an optional period of five to ten minutes in length within which are practiced the fundamental skills, stunts and activities of the exercises and athletic events performed in the main body of the period.

II. Warming-Up Period: Minimum time: ten minutes
Consists of:
a. marching
b. running or skipping

III. Exercise Period: Minimum time: five minutes
Consists of:
a. free standing exercises done with or without hand apparatus
b. use of hand apparatus
1. wands
2. dumbbells
3. Indian clubs (Grade IX)
c. mimetic or rhythmic exercises

IV. Recreational Period: Minimum time: fifteen minutes
Consists of
a. organized games
b. dances
c. stunts
d. apparatus: vaults and jumps

1. Physical Education Course of Study, Boston Public Schools, Doc.No.2,(1938)

General Procedure

The program content for the school year is distributed over five bi-monthly periods. A separate unit of study is presented in each of these periods. This chapter concerns an experiment which covers two of these bi-monthly periods.

In the development of this work the material relating to the Grecian activities has been organized according to the fundamental skills of jumping running, throwing and rhythmic activities. The material of the second unit (the medieval and early modern activities) has been organized according to the historical development of those activities in Chapter III.

For greater clarity these events are arranged in the development of this program according to the plan outlined above. Thus each activity will be described according to its place in the program. For example, in the Greek unit the technique of double quick running will be found classified under "II. The Warming-up Period" of the section covering the fundamental skill of running and jumping.

The choice of material for these units has been limited by the selection of only those activities which were found to be adaptable to the physical education program of the Junior High School.

Within the limited time of each period it was necessary to set the stage by stimulation of interest through the description of activities as performed in ancient times. Remembering that the prime purpose of the physical education class is the development of health and social objectives through the performance of physical activity, too much time could not be consumed in the historic explanation of the activities about to be presen-

ted. None the less at least one half of the initial period of each bi-monthly unit was used to set the stage for the fifteen lessons of the unit which were to follow. As the work progressed, interest in the activities, beyond the natural interest in personal achievement, was maintained through integration of literature and physical activity. Constant reference was made during the teaching periods to some phase of life of ancient times traceable to the activity.

Instructional Unit One - - - Ancient Greek

A. Jumping and Running

I. Free Play

a. Activity

1. Jump rope; individual activity

b. Specific objective: Development of

1. Rhythm
2. Timing
3. Endurance through proper breathing

c. Basis of motivation

1. Pupil reference[1]

(a) M.[2] Trojan War
(b) M. The Argonauts
(c) T. The Golden Fleece

2. Historical reference; Chap. II., Running

3. Other references

(a) Museum[3]: Vase No. 02.521. Boy with a rope

1. Pupil reference concerns required reading of seventh grade
2. M. is symbol for Myths and Legends of Greece and Rome; T. for Tanglewood Tales. See Appendix. C.
3. Unless otherwise specified, Museum means Boston Museum of Fine Arts.

A. Jumping and Running (cont.)

Procedure for teaching: The lack of co-ordination displayed by the boys during the primary stages of this activity served as an excellent object lesson in showing that there was a necessity for rhythmic ability in the conservation of strength and the development of endurance. For this reason, it was introduced in the free play period as an application of the principles of marathon or double-quick running.

II. Warming-up Period

a. Activities

1. Marching: forward, to rear
2. Running: double quick

b. Specific objective: Development of

1. Alertness through response to successive commands
2. Rhythmic ability

c. Basis of motivation

1. Pupil reference

(a) M. Trojan War
(b) M. The Argonauts
(c) M. Prometheus
(d) M. Deadalus and Icarus
(e) T. The Golden Fleece

2. Historical reference: Chap. II., Running

3. Other references

(a) Museum

(1) Vase No. 98.876 Runners
(2) Vase No. 89.270 Long Distance Runners
(3) Vase No. 42-10 Sprinters (Fogg Museum, Harvard)

(b) Marathons

(1) Marathons as athletic events in modern times
(2) The Boston Marathon

A. Jumping and Running (cont.)

(3) Phidipides and the battle of Marathon
(4) Phidipides by Robert Browning

Procedure for teaching: Because boys confuse the running skill with racing, the technique of double-quick running was taught with emphasis upon the Greek objective--endurance. A method, called marathon technique, was evolved in which the realization of the necessity for lightness of tread and conservation of strength was experienced by the runners. This was accomplished through the realization by actual gymnasium experience in the extent of endurance necessary for a full Marathon run. The lessons in double quick were timed from one-half minute, increasing in the sixteen lessons of the unit to two full minutes. This increase in time was determined by a proportionate increase in the ability of the running technique.

III. Exercise Period

a. Activities. See"III. Exercise Period", under "Rhythmic Activities".

IV. Recreational Period. Part 1

a. Activity

1. Broad jump

b. Specific objective: Development of

1. Timing
2. Rhythm
3. Co-ordination

c. Basis of motivation

1. Pupil reference

(a) M. Perseus
(b) T. The Gorgon's Head

2. Historical reference: Chap. II., Running, jumping.

A. Jumping and Running (cont.)

3. Other references

(a) Museum

(1) Vase No. 01.802 Broad Jump
(2) Vase No. 99.501 Halteres

Procedure for teaching: This activity was taught in conjunction with the performance of the dumb-bell drill. After the technique of the broad jump had been mastered, heavy iron dumb-bells weighing two pounds were used in an effort to approximate the ancient Greek practice of jumping with halteres.

IV. Recreational Period. Part 2

a. Activities: Races

1. Obstacle races
2. Relay races in circle and line formation

b. Specific objective: Development of

1. Speed through rhythmic co-ordination

c. Basis of motivation

1. Pupil reference

(a) M. Prometheus
(b) M. Apollo and Daphne
(c) M. Perseus
(d) T. The Gorgon's Head

2. Historical reference: Chap. II., Running

3. Other references

(a) Museum

(1) Vase No. 01.8033 Rules of Racing
(2) Vase No. 96.720 Rules of Racing
(3) Vase No. 13.205 Torch Race
(4) Vase No. 13.38 Race in Armor

A. Jumping and Running (cont.)

Procedure for teaching: In relay racing as in no other activity it was possible to approximate the physical aspects of the ancient torch races through actual participation. Even of more importance was the fact that the spiritual aims of the Greeks could be translated into the educational objectives of co-operative living. This was done through the dramatization of an ancient torch race which proved to be an excellent example of collaborative effort. In this manner the rules governing modern racing were given meaning, for the baton, instead of a stick of wood, became a sacred torch and as such was passed on to the next worthy compatriot whose sacred duty it was to continue its progress held aloft and unsullied. The seriousness and importance of disqualifications were more readily understood when viewed as the dishonorable actions of persons unfitted for entrance into the sacred race.

IV. Recreational Period. Part 3

a. Activities: Tag games

1. Three deep
2. Maze tag

b. Specific objective: Development of

1. Alertness through ability in quick change of direction

c. Basis of motivation

1. Pupil reference

(a) M. Theseus and Ariadne
(b) T. The Minotaur

2. Historical reference: Chap. II., Running

3. Other references

A. Jumping and Running (cont.)

(a) The maze at Girl Scout Headquarters in Waltham

Procedure for teaching: Past experience in the teaching of the game of maze tag had proven children of this age level unresponsive to the meaning of the word maze. By dramatizing the mythical legend of the Minotaur in the playing of this game, both the game of maze tag and three deep became more than an experience in physical education.

B. Throwing

I. Free Play

a. Activities

1. Shooting for baskets
2. Basketball and football throwing for distance
3. Baseball target practice

b. Specific objective: Development of

1. Co-ordination and placement in throwing
2. Accuracy in hitting an immovable target

c. Basis of motivation

1. Pupil reference

(a) M. The Argonauts
(b) M. Perseus and the Dragon
(c) T. The Golden Fleece
(d) T. The Gorgon's Head

2. Historical reference: Chap. II., Throwing Discus and Javelin

3. Other references

(a) Museum

(1) Vase No. 01.8020 Technique of Throwing
(2) Vase No. 95.35 Javelin Throwing (Amentum)

Procedure for teaching: The military significance of the throwing skill was used as the major basis of motivation in the presentation of this

B. Throwing (cont.)

material. The evolution of this skill from a purely utilitarian to a recreational activity intrigued the children to such an extent that one might think they were preparing for war games.

II. Warming-Up Period: No Activity

III. Exercise Period

a. Activity: Rhythmic Ball Drill[1]

b. Specific objective: Development of

1. Rhythmic co-ordination of specific body movements

c. Basis of motivation

1. Pupil reference

(a) M. Ulysses and Nausicia

2. Historical reference: Chap. II., Ball Play

Procedure for teaching: The learning of this skill served as a self-testing device. Each pupil was able to gauge his progression in rhythmic co-ordination by comparison with the efforts displayed by his classmates. Those who were slow in the acquisition of the skill of keeping the ball under directional control, prompted by the desire for recognition of rhythmic ability, practiced outside of school hours.

IV. Recreational Period

a. Activity: Triangolis[2]

1. Specific objective: Development of co-ordination

1. Bancroft, Games, p. 322
2. A.S. Sieveking, "Football", Field, CXIX, 1912. Also, Appendix A.

B. Throwing (cont.)

2. Basis of motivation

(a) Pupil reference

(1) M. Ulysses and Nausicia
(2) M. Perseus, the Dragon Slayer
(3) T. The Gorgon's Head

(b) Historical reference: Chap. II., Ball Play

(c) Other references: Field, CXIX,(1912)

Procedure for teaching: In this activity adapted from the original Greek game the number of players participating remained the same, three, but the number of balls used was reduced so that instead of two being caught and passed by each player simultaneously, each player caught and tossed but one. This activity proved to be a particularly good object lesson in showing the necessity of unremitting practice for the mastery of a skill.

b. Activity: Epiknosis[1]

1. Specific objective: Development of distance passing

2. Basis of motivation

(a) Pupil reference

(1) M. Perseus, the Dragon Slayer

(b) Historical reference: Chap. II., Ball Playing and Discus Throwing

(c) Other references: E.N. Gardiner, Athletics of the Ancient World, Plate No. 219

Procedure for teaching: This material was taught in conjunction with the skills of basket-ball and football passing for distance and placement.

1. Ibid.

B. Throwing (cont.)

which were practiced during free play time. In participating in Epiknosis, a group activity, the necessity for working as a unit against the efforts of theopposing team or enemy served to dramatize the necessity for team play. The pupils through actual experience discovered the fact that more points were gained by the team whose members made a practice of passing the ball, for the scoring play, to their own team mates who were in unguarded positions. This brought forcibly to the attention of the children the selfishness of playing the ball to one's self.

c. Activity: End Ball[1]

1. Specific objective: Development of teamwork in

(a) Distance passing

(b) Placement

2. Basis of motivation: Same as for Epiknosis

Procedure for teaching: This game was used as the second step in the progression of team play and followed the mastery of Epiknosis.

C. Rhythmic Activities

I. Free Play: No Activity

II. Warming-Up Period: No Activity

III. Exercise Period

a. Activity: Dumbbell Drill

1. Specific objective: Acquisition of rhythmic co-ordination

2. Basic motivation

(a) Pupil reference

C. Rhythmic Activities (cont.)

(1) M. Trojan War
(2) M. Perseus

(b) Historical reference: Chap. II., Jumping

(c) Other references: Museum

(1) Vase No. 01.802 Use of Halteres
(2) Vase No. 01.8033 Musical Accompanists
(3) Vase No. 99.501 Halteres

Procedure for teaching: In presenting this material the methodical characteristics of the Greeks in their application to minute detail was stressed. To demonstrate this the technique of the broad jump was analyzed showing the necessity for rhythmic skill and perfect timing. By paralleling the ancient Grecian halteres exercises which were the preparatory skills of the broad jump with the modern dumbbell drill, the latter acquired a utility hitherto unrecognized.

b. Activity: Jump Rope Drill

1. Specific objective: Development of ability to work in rhythmic co-ordination with a partner.

2. Basis of motivation

(a) Pupil reference

(1) M. Trojan War
(2) M. Perseus

(b) Historical reference: Chap II., Jump Rope Drill, Dancing

(c) Other references: Museum

(1) Vase No. 01.721 Boy with a Rope
(2) Vase No. 01.820 Jumping

Procedure for teaching: The jump rope drill was introduced as an individual activity. After figures one through four had been mastered, the drill was performed as a couple activity. The working together in rhythmic

C. Rhythmic Activities (cont.)

unison evoked an enthusiasm which was climaxed by the teaching of figure five.

c. Activity: Oxdansen[1]

1. Specific objective: Development of rhythmic ability

2. Basis of motivation

(a) Pupil reference: M. Perseus

(b) Historical reference: Chap. II., Dancing

(c) Other reference: Museum, Vase No. 10.002 Dancing

Procedure for teaching: The importance of Rhythmic ability and synchronized action was brought to the attention of the pupils by the performance of this humerus dance, the pugilistic aspects of which had a counterpart in the naked dance of the ancient Greeks.

Instructional Unit II - Medieval and Early Modern

A. The Tournament

I. Free Play

a. Activity: Twirl Rope

1. Specific objective: Development of

(a) Rhythm
(b) Timing

2. Basis of motivation

(a) Pupil reference

(1) K.[1] A Knight Royal
(2) K. "Rather death than dishonor".

1. K. refers to <u>King Arthur and His Noble Knights</u>, Sir Thomas Mallory

A. The Tournament (cont.)

(b) Historical reference: Chap. III., Quintain Tilting

(c) Other reference: Armored figures, Germanic Museum, Harvard

Procedure for teaching: This group activity was introduced as a progressive step in the skill of rope jumping for it required group instead of individual timing. The twirler of the rope was likened to the revolving figure of the quintain and the pupil hit with the ball to the luckless knight unable to dodge the blow of the quintain.

b. Activity: Keep Away

1. Specific objectives

(a) Development of placement in throwing
(b) Realization of the necessity for rules

2. Basis of motivation

(a) Pupil reference: K. La Belle Iseult

(b) Historical reference: Chap. III,, The Tournament

Procedure for teaching: This activity was used as a means of teaching the necessity for rules in competitive team play. This was done by tracing two of the rules most frequently found in modern team games to the rules governing the Tournament, and applying them to the game of Keep Away. The rules were 1) the length of time governing a playing period, and 2) the procedure to be followed in "time out".

Individual pupils were appointed as time keepers. Upon these men rested the responsibility of equality in the length of playing periods.

II. Warming-Up Period: No Activity

III. Exercise Period

Boston University
School of Education
Library

A. The Tournament (cont.)

a. Activity: Mimetic exercises[1]

b. Specific objective: Development of neuromuscular co-ordination

c. Basis of motivation

1. Pupil reference: K. A Knight Royal

2. Historical reference: Chap. III., Quintain Tilting, Coursing the Hare and Cudgel Play

Procedure for teaching: These mimetic exercises were introduced as a means of dramatizing the recreational activities of the medieval and early modern peoples.

IV. Recreational Period

a. Activity: Bombardment[2]

b. Specific objective: Development of Accuracy in Throwing

c. Basis of motivation

1. Historical references: Chap. III., Tournament, Quintain Tilting, and Ring Tilting

Procedure in teaching: All team games in which opposing units faced one another in line formation as in volley ball, progressive dodge ball and bombardment were represented as being not opponents but enemies. This also was the method used in the teaching of Epiknosis.

B. Recreational Activities (Archery and Bowling)

I. Free Play: No Activity

1. Appendix B
2. S.C. Staley, Games, Contests and Relays, p. 202

B. Recreational Activities (Archery and Bowling) (cont.)

II. Warming-Up Period: No Activity

III. Exercise Period: Mimetic exercises

IV. Recreational Period

a. Activity: Bowling

b. Specific objective: Development of

1. Placement of passing the ball
2. Pupil ability in scoring

c. Basis of motivation

1. Pupil reference: K. Iseult of Brittany

2. Historical reference: Chap. III,, Bowling

Procedure for teaching: The class was organized into nine bowling teams; nine alleys were mapped out on the gymnasium floor. Each team member recorded his own score on the team sheet. Noticeable interest in the activity beyond the novelty of the game was thought to be due to the stressing of the historical background of the game.

C. Recreational Activities (Ball Games)

I. Free Play: No Activity

II. Warming-up Period: No Activity

III. Exercise Period: No Activity

IV. Recreational Period

a. Activity: Philadelphia Kick

b. Specific objective: Application of individual skills of throwing and kicking to team play in group activity

C. Recreational Activities (Ball Games)(cont.)

c. Basis of motivation

1. Historical reference: Chap. III., Ball Games

Procedure for teaching: Because the playing of football and soccer offered too great an opportunity for injury through personal contact, these games were eliminated. However, to illustrate the antiquity of team play and the historical background of the game of football, the Philadelphia Kick[1] was introduced.

D. Recreational Activities (Dancing)

I. Free Play: No Activity

II. Warming-Up Period: No Activity

III. Exercise Period: No Activity

IV. Recreational Period

a. Activity: Tumbling and stunts

b. Specific objective: Development of neuromuscular co-ordination through activities requiring perfect balance.

c. Basis of motivation: Historical reference: Chap. III, Dancing

Procedure in teaching: The activities of tumbling and stunts were taught in the traditional manner. However, in summarizing the historical background of these activities, stress was first given the change in the meaning of words. To illustrate this the class was told to prepare for a lesson in medieval dancing. At a prearranged signal mats were arranged on

1. G. Baker, F. Warnock, G. Christensen, Graded Lessons in Physical Education, p. 329

D. Recreational Activities (Dancing) (cont.)

the gymnasium floor and before a group of mystified children a demonstration of a forward roll was given by a fellow pupil. As the boy who performed the activity completed the roll, he was congratulated upon his grace in dancing. This cleared up the mystery of the dancing lesson.

CHAPTER V

EVALUATION OF RESULTS

In the Junior High School in which this experiment was conducted the classes in physical education were not homogeneously organized according to mental ability.

The class comprising the experimental group consisted of boys from three home rooms. One section within the group was taking a foreign language course, one a general course and one a mechanic arts course.

The control group consisted of boys from two home rooms. One section in this group was taking a foreign language course and the other was taking a mechanic arts course. Both the experimental and the control groups contained a membership of forty-six boys.

These two physical education classes were selected because:

1. In relation to the other classes of the physical education program, they were the nearest to approach one another in academic interests. This has been noted above in the similarity of courses.
2. It was desirable to secure groups which differed as little as possible from one another in intellectual and physical characteristics. In relation to the intellectual standing of class members, the I.Q. ratings afforded the necessary information. The height and weight records were the only criteria available showing physical characteristics. The median in both groups in intelligence, height and weight offered no great variance as shown by the following table.

TABLE I. MEDIAN IN I. Q. HEIGHT AND WEIGHT OF EXPERIMENTAL AND CONTROL GROUPS

	Experimental Group	Control Group
I. Q.	99	91
Height	59"	57½"
Weight	90 lbs.	86 lbs.

The experimental group exhibited a range in I.Q. ratings from 59 to 123 with the median at 99. The control group ranged in intelligence from 66 to 132 with a median of 91. It will be noted that the median in intelligence, height and weight was slightly superior in the experimental group to that in the control group.

Objective Evaluation

Objective means of evaluating this study were limited. This was due to the fact that no means has as yet been provided for by the Boston Course of Study in Physical Education for objective measurement. It was possible however to administer a few skill tests which grew out of the instructional units.

The three skills measured were basket-ball goal shooting, baseball target throw for accuracy, and standing broad jump. Results of the final tests in these events are shown in the tables which follow.

For the purpose of determining the existence of differences in performance, a comparison of the results of the experimental and the control groups in basket-ball goal shooting is given in Table II.

TABLE II. BASKET-BALL GOAL SHOOTING

Number of Successful Tries*	Experimental Group	Control Group
5	3	1
4	5	2
3	16	10
2	20	26
1	2	7
Range	1-5	1-5
Median	3	2

*Each contestant allowed five turns

From Table II it may be said that the experimental group was superior to the control group in basket-ball goal shooting as reflected in the median. The experimental group members were able to make three goals out of five while the control group accomplished but two out of five.

A similar table to show the comparison in performance of the two groups in baseball target throw for accuracy is depcited in Table III.

TABLE III. BASEBALL TARGET THROW FOR ACCURACY

Number of Successful Tries	Experimental Group	Control Group
5	16	7
4	13	8
3	9	13
2	8	10
1		8
Range	2-5	1-5
Median	3	2

*Each contestant allowed five turns

From a study of Table III it will be noted that the superiority of the experimental group is evident in the higher median.

Summary of Accuracy Throw Data

It is significant that in Tables II and III the experimental group should show a superiority over the control group in activities which both groups had shared as life experiences previous to participation in formal physical education work.

These activities consisted in both cases of throwing. These were activities which in all probability had to some extent been experienced by all members of the class before entering the physical education class. On the other hand, the majority of the class members had had no experience whatever in the technique of jumping. Thus in the teaching of this activity, many of the pupils were receiving the fundamentals of the skill for the first time.

In testing in the standing broad jump event three trials were allowed each contestant. The highest score obtained by each individual was the one recorded. A comparison of the two groups in this activity is illustrated in Table IV which is on the next page.

In Table IV the median superiority held by the experimental group, though but two inches over that of the control group, is felt to be significant of the differences in methods of subject matter presentation.

Subjective Evaluation

Subjective evaluation has been based upon pupil interest. In the presentation and conduct of the foregoing activity units the most noticeable factor differentiating the experimental from the control group was the intensity of interest displayed by the members of the former group.

TABLE IV. STANDING BROAD JUMP

Records*	Number of Cases	
	Experimental Group	Control Group
4'8"		1
5		1
5 1		1
5 2		2
5 3		2
5 4		2
5 5		2
5 6	1	2
5 7	2	3
5 8	1	
5 9	2	3
5 10	4	4
6	6	3
6 2	5	4
6 3	5	5
6 4	4	4
6 5	4	4
6 6	3	2
6 7	2	1
6 8	2	
6 9	2	
6 10	1	
Total Number of Boys Jumping	46	46
Range	5'6" - 6'10"	4'8" - 6'7"
Median	6'2"	6'0"

*Jumps are Figured to the Nearest Inch

This interest of the experimental group had further outcomes which differentiated it from the control group.

1. The general performance of the experimental group was superior . Historical and cultural incentives having been utilized in the presentation of all physical activities, this group was found to react with an equal amount of interest to all events of the program. By contrast, the control

group responded as any average class of seventh grade boys to an activities program. With this latter group interest was keen in the games and the fundamental athletic skills but mediocre in marching, running and exercises.

2. A demand was expressed for rhythmic activities by the experimental group. The control group, however, showed no evidence of sustained interest in these events. When hand apparatus (jump ropes, dumbbells, etc.) were introduced, the children were quite willing to go on to something new after the novelty of the material had worn off. This proved not to be so with the experimental group for they repeatedly expressed disappointment at participating in programs of activities which had been planned without the inclusion of a dumbbell drill or some other rhythmic activity employing musical accompaniment. The reason for this popularity was thought to be due to the manner of presenting the rhythmic material as the necessary foundation in the timing of all athletic events.

3. A desire was manifested for a broader cultural background. This was met in two ways:

a. by obtaining from the Boston Public Library a selection of books containing stories of Ancient Greece and of medieval and early modern times. To gain some idea of the general reading habits, the library books were not limited to use by the experimental group alone. The library shelf was maintained within the precincts of the Gymnasium for the benefit of both classes.

b. by sponsoring a trip to the Boston Museum of Fine Arts for first-hand inspection of the Greek vases and art objects pertaining to medieval life. The only pupils responding to this field trip were those of the experimental group. Of the class of forty-six boys twenty-four were

interested in the expedition. Of the twenty-two who did not respond, some were restricted due to the financial outlay and others had already visited the Museum with their parents.

4. There was a marked reduction in behavior problems. Objective evidence of this unlooked for outcome was to be found in the minority of disciplinary procedures necessary as compared with those used with the control group.

The educational outcome of this experiment in integration cannot be correctly evaluated by reviewing only the work accomplished in the field of physical education.

The teacher of English who worked in that field with the experimental group reports that interest in the literature of the Ancient Greek, medieval and early modern times was far superior to that of other classes who were introduced to the subject through the vehicle of literature alone.

CHAPTER VI

RECOMMENDATIONS AND CONCLUSION

The studies of the school program should bear a direct relationship to life situations. According to Dewey, the child learns best who experiences some motor activity in the learning process.[1] In this way, more than one brain center will have received stimulation and formed habit and memory patterns. The physical education program through integration with other subjects is peculiarly fitted to the adaptation of this principle.

Social and cultural customs have contributed to the formation of a varied and colorful body of literature. The interpretation of this literature through educational experiences gained outside of the literature class will educate the student to the enormity of changed life situations and social conditions. The pupil, through these experiences, regardless of his ability to read,[2] may make a unique contribution to future class discussions. When the physical education program is used for the interpretation of these life situations of another period, the school program may be said to be approaching some degree of integration.

The possibilities for developing an integrated personality in her pupils should spur the teacher of physical education to reach beyond the bounds of the traditional program in this field. Teachers who may wish to delve further into this and related programs of physical education might well consider the following suggestions for investigation.

1. J. Dewey, Experience and Education, pp. 16-17
2. D. Durrell, Improvement of Basic Reading Abilities, p. 7

1. The integration of physical education with art, music or the social sciences.
2. A historical investigation into the physical activities pertaining to the American Indian.
3. An investigation into the recreational activities of the early American settlers.

Research into the historical background of physical activity contained within this thesis has been limited. This limitation has been due to the use of English as the only language tool of the writer. This proved to be a marked hinderance in the investigation into the Greek background, for the major work in translations relative to physical training seems to havebeen done by German and French scholars. One work in particular, perhaps because of its inaccessibility, has acquired a value far beyond its probable worth. This is Philostratus's Gymnastics. The work is quoted by all modern writers in the field of Greek athletics. It has not been translated into English although there are Latin, French and German translations obtainable. A translation of this work by one of the students majoring in languages would be a valuable addition to the college library.

In Conclusion: The program of physical education outlined in the two units of this thesis was augmented by using some of the literature of the seventh grade as a point of departure for investigation into the cultural background of the period and locale of the stories. The historical background of fundamental physical skills presented in physical education programs afforded the pupils a twofold incentive for further study by providing 1) a broader literary background, and 2) a deeper concept of the meaning of health and physical education.

APPENDIX A

GAMES

1. Keep Away. This game is organized into three teams. The teams are arranged in three parallel lines. The object of the game is to pass the ball from end team to end team through the opposing center team. Points are scored by the number of catches made by the center team. Each team has a one-minute period for center field play.

2. Twirl Rope. A rope eight to ten feet in length, weighted with a soccer or basket-ball, is swung around the circumference of a circle about which children are standing. The object of the game is to jump over the rope. Inability for a player to do this means forfeiting one's place to enter the center of the circle and become the twirler of the rope.

APPENDIX B

RHYTHMIC ACTIVITIES

1. Jump Rope Drill - Formation: Couples arranged in lines

Figure I

Counts 1 - 4	Four double jumps (feet together, one jump for each swing of the rope
5 - 8	Four arm circles swinging rope in outside hand (both handles of rope in one hand)
9 - 12	Four arm circles swinging rope in inside hand
13 - 16	Four double jumps
17 - 32	Repeat all; 32 counts in all

Figure II

Counts 1 - 4	Odd lines four single skips diagonally forward
5 - 8	Odd lines four single skips diagonally backward
	During the above 8 counts the even lines stand still
9 - 16	For the next 8 counts the procedure is reversed
17 - 32	Repeat all; 32 counts in all

Figure III

Counts 1 - 4	Four one-half swings (teacup and saucer)
5 - 8	Four double jumps
9 - 12	Four arm circles swinging rope in outside hand
13 - 16	Four arm circles swinging rope in inside hand
17 - 32	Repeat all; 32 counts in all

Figure IV

Counts 1 - 4	Odd lines four single skips diagonally forward
5 - 8	Odd lines four single skips diagonally backward

1. Jump Rope Drill (cont.)

Counts 9 - 16	Even lines take a three-quarter turn right and perform the first 8 counts above
17 - 32	Reverse the above direction, odd lines going back and even lines going forward; 32 counts in all.

2. Mimetic Exercises - Formation: Single lines facing forward

Figure I. Coursing the Hare

Counts 1 - 4	Four marching steps forward on toes (stalking)
5, 6	Bend left knee, kneel on right at the same time bringing arms into regulation position for firing the long bow (sighting and covering prey)
7, 8	Position
9 - 32	Repeat all three times; 32 counts in all

Figure II. Quarter Staff

(A couple activity, class numbered off in twos)

Counts 1, 2	Both numbers one and two jump two on guard
3	Number one advances forward hopping on right foot, right knee bent, left leg extended, forward toe touching the floor
4	Repeat 3
5, 6	Lunge forward, weight now on the right foot
7, 8	Bring the left foot to the right to position
3	Number two retreats
4	Repeat three
5, 6	Lunge forward, weight now on the right foot
7, 8	Bring the left foot to the right to position

Repeat three times in all; first, Number one advances; Number two retreats; second, Number one retreats; Number two advances; third and fourth, repetition of one and two.

2. Mimetic Exercises (cont.)

Figure III. Quintain Tilting

(A couple activity)

Count 1	Number one steps back on the right foot, body making a quarter turn to the right but head facing forward in the starting position (facing imaginary target for the release of the javelin), arms in sideward raised position approximating the start of the javelin throw. Weight on right foot.
2	Bring the right arm forward as if releasing the javelin.
3, 4	Bring the right foot up to the left to position
	Number two takes the part of the quintain
1	Left arm raised sideward to shoulder level, right arm parallel with left
2.	Move the right arm to the right
3, 4	About face and come to position.
	Numbers one and two repeat this action, then change, Number one taking the part of the quintain and Number two thrusting the javelin.
	This action takes place four times; with 32 counts in all.

3. Ball Drill

a. Music: Parade of the Wooden Soldiers

b. Formation: Partners facing front, about three feet apart; the partner on the right is in the odd line; the partner on the left is in the even line.

Figure I

2 Measures	Bounce ball; catch it; repeat
2	Bounce ball three times; then catch it
2	Bounce ball; catch it; repeat

3. Ball Drill (cont.)

2 Measures	Bounce ball twice, catch it; then jump and face partner.
	On the jump, those in the even lines stoop and place ball on floor in front of their feet.
	Figure II
1 Measure	Odd lines, using chest throw, toss ball to even lines. Even lines catch ball.
1	Even lines now bounce ball to odd lines. Odd lines catch ball.
6	Repeat above; odd lines throwing ball, even lines bouncing ball. Each line throws or bounces ball three times.
	After the even lines bounce the ball for the fourth time, they stoop and pick up the ball at their feet.
	Figure III
1 Measure	Lunge forward R stretching arms forward at same time. Bring R foot back to L and bend arms at elbow, holding ball in front of chest.
1	Repeat lunge with left foot.
2	With a quarter turn to right repeat lunge with R and L
2	Repeat quarter turn to R and repeat lunge with R and L
2	Repeat quarter turn to R and repeat lunge with R and L
	Partners should now be facing.
	Figure IV
2 Measures	Three slides to own R; then throw ball upward and catch it.
2	Three slides to own L; then throw ball upward and catch it.
4	Repeat all.

3. Ball Drill (cont.)

Figure V

1 Measure	Those in even lines step forward on R foot; kneel on the left knee.
7	Hold ball overhead in this kneeling position for seven measures. While even lines are kneeling, odd lines starting with R foot do seven hops advancing forward and going around kneeling partner, then back to own place.
	On each hop the ball is thrown upward and caught.
	Start with R foot.
	On the eighth measure (odd line now back in own place) step forward L and kneel on R knee, ball overhead.
	Even lines now do seven step hops around kneeling partner, throwing and catching ball on each hop.
	On eighth measure even lines (now back in own place) stop L and kneel on R knee.

4. Dumbbell Drill - Formation: Single lines facing forward

Figure I

Count 1	Arms forward, raise to shoulder level; toe touching forward
2	Arms move to horizontal; heels raise
3	Come back to position of count 2
4	Position
	Repeat three times

Figure II

Count 1	Arms sideward, raise to horizontal
2	Arms overhead to vertical
3	Arms to horizontal position
4	Position

4. Dumbbell Drill (cont.)

Repeat three times

Figure III

Count 1	Arms forward raise and left knee forward bend (click the bells)
2	Arms sideward move to horizontal and left leg forward stretch (click the bells)
3	Return to position of Count 2
4	Position

Repeat three times

Figure IV

Counts 1, 2	Arms forward raise to horizontal and knees deep bend
3, 4	Position

Repeat three times

Figure V

Counts 1, 2	Arms sideward raise to vertical position (click the the bells), jump to stride position
3, 4	Position

Repeat seven times in all.

APPENDIX C

LITERATURE

1. Literary works chosen as a basis for securing the historical background

Period	Work	Author
Ancient	Myths and Legends of Greece and Rome	W. B. Forbush, compiler
Ancient	Tanglewood Tales	Nathaniel Hawthorne
Medieval and Early Modern	Death and Burial of Robin Hood	Anonymous
Medieval and Early Modern	King Arthur and His Noble Knights	Sir Thomas Malory (MacLeod, Editor)

2. Library books used as outside reading.

Bulfinch, Thomas, Age of Fable, Lothrop Lee & Shepard Co., 1928

Colum, Padraic, The Golden Fleece, MacMillan Co., 1921

Davis, William Stearns, A Day in Old Athens, Allyn & Bacon, 1941

Guerber, Helene Adeline, Legends of the Middle Ages, American Book Co., 1896

Guerber, Helene Adeline, Myths of Greece and Rome, American Book Co.,1893

Guerber, Helene Adeline, Story of the Romans, American Book Co., 1896

Hawthorne, Nathaniel, Tanglewood Tales, Houghton Mifflin Co., 1889

Hawthorne, Nathaniel, Wonder Book, Houghton Mifflin Co., 1883

Kingsley, Charles, Greek Heroes, Sturgis & Walton Co., 1909

Lamprey, Louise, Children of Rome, Little Brown & Co., 1926

Lamprey, Louise, Children of Ancient Greece, Little Brown & Co., 1925

2. Library books used as outside reading (cont.)

Lanier, Sydney, Book of Bravery, Chas. Scribner's Sons, 1910

Lanier, Sydney, Boy's Froissart, Chas. Scribner's Sons, 1907

Mabie, Hamilton Wright, Legends that Every Child Should Know, Grosset & Dunlop, 1906

Mabie, Hamilton Wright, Myths that Every Child Should Know, Grosset & Dunlop, 1906

Malory, Thomas, Book of King Arthur and His Knights, Frederick A. Stokes Co., 1934

Malory, Thomas, Boy's King Arthur, Frederick A. Stokes Co., 1934

Mills, Dorothy, Book of the Ancient Greeks, G. P. Putnam's Sons, 1931

Mills, Dorothy, Books of the Ancient World, G. P. Putnam's Sons, 1931

Pyle, Howard, Champions of the Round Table, Chas. Scribner's Sons, 1915

Pyle, Howard, The Story of the Grail, Chas. Scribner's Sons, 1927

Pyle, Howard, Men of Iron, Harper & Brothers, 1919

Quennell, Marjorie and C. H. B., Everyday Things in Classical Greece, G. P. Putnam's Sons, 1933

Snedeker, Caroline Dale, The Spartan, Doubleday Doran & Co., 1936

Snedeker, Caroline Dale, Theras and His Town, Doubleday Doran & Co.,1936

St. Nicholas (retold from), Stories of the Middle Ages, The Century Co., 1921

Tappan, Eva March, When Knights Were Bold, Houghton Mifflin Co., 1911

Tappan, Eva March, The Story of the Roman People, Houghton Mifflin Co., 1910.

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Durrell, Donal DeWitt. Improvement of Basic Reading Abilities, Yonkers-On the Hudson: World Book Co., 1940.

Elyot, Sir Thomas. The Gouvernor, London: Herman & Ridgeway, 1834.

Erasmus, Desiderius. Familiar Colliloquies (trans. Nathan Bailey), London: Wamback & Adams, 1877.

Freeman, Kenneth John. Schools of Hellas, London: Macmillan, 1907.

Fulcomer, Edwin Spurgeon. "American Culture", Teachers College Record XXXVII (February 1936).

Galen, Claudius. The Art of Physick, London: Peter Cote, 1652, trans. by Peter Culpeper.

Gardiner, Norman Edward. Athletics of the Ancient World, Oxford: Clarendon Press, 1930.

Grosart, Alexander B. Annalia Dubrensia, Lancashire: Shakespeare Society, 1877.

Harrison, James Albert. "Physical Culture of the Greeks", Chatauqua, IX (May, 1889)

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